Supreme Court, U.S.
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No. 91-2040

IN THE

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1991

J.M., guardian ad litem
of his unborn child

Petitioner,

-against-

V.C.,

Respondent.

REPLY BRIEF
SUBMITTED BY J.M., AS GUARDIAN

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TABLE OF CONTENTS

TABLE OF AUTHORITIES iii

ARGUMENT 1

POINT I THE COURT HAS JURISDICTION OVER THIS CASE. J.M., AS GUARDIAN, REPRESENTS A PERSON IN FACT ENTITLED TO ACCESS TO THE COURT. THE ORDERS OF THE NEW JERSEY COURTS CONSTITUTE STATE ACTION. 1

A. THE CHILD IS A PERSON IN FACT AND THE COURT HAS JURISDICTION TO DECIDE THE CHILD'S RIGHTS. 1

B. THE ORDERS OF THE NEW JERSEY COURT THAT FAILED TO RECOGNIZE THE CONSTITUTIONAL RIGHTS OF THE CHILD AND GUARDIAN CONSTITUTE STATE ACTION. 3

POINT II THERE IS A CONSENSUS WITHIN THE SCIENTIFIC AND MEDICAL COMMUNITIES CONCERNING THE BIOLOGICAL AND GENETIC FACTS WHICH ARE PERTINENT TO WHEN THE BIOLOGICAL LIFE OF A PERSON BEGINS. IT IS NOW KNOWN THAT FULL CORTICAL DEVELOPMENT IS NOT NECESSARY FOR THE CHILD TO EXPERIENCE PAIN PRIOR TO BIRTH - THE EVIDENCE SUPPORTS THE CONCLUSION THAT THE UNBORN CHILD, PRIOR TO BIRTH EXPERIENCES PAIN LONG BEFORE THE TWENTY-FIFTH WEEK OF LIFE. 4

A. THERE IS A CONSENSUS WITHIN THE SCIENTIFIC AND MEDICAL COMMUNITIES CONCERNING THE CRITICAL BIOLOGICAL AND GENETIC FACTS WHICH ARE PERTINENT TO WHEN THE LIFE OF A PERSON BEGINS. 5

B. IT IS NOW KNOWN THAT FULL CORTICAL DEVELOPMENT IS NOT NECESSARY FOR THE CHILD TO EXPERIENCE PAIN PRIOR TO BIRTH - THE EVIDENCE SUPPORTS THE CONCLUSION THAT THE UNBORN CHILD EXPERIENCES PAIN LONG BEFORE THE TWENTY-FIFTH WEEK OF LIFE. 9

1. CORDICAL DEVELOPMENT IS NOT NECESSSARY TO EXPERIENCE PAIN. 10

2. THE NEED TO RELIEVE PAIN DURING FETAL SURGERY. 12

3. ASSUMPTIONS ABOUT PAIN 14

POINT III THE COURT SHOULD GRANT CERTIORARI TO DETERMINE IF A CHILD, WHILE UNBORN, ENJOYS FOURTEENTH AMENDMENT RIGHTS. 18

CONCLUSION 20

TABLE OF AUTHORITIES

CITATIONS

Burnet v. Coronado Oil & Gas Company, 285 U.S. 393 (1932) 10, 19

Jersey Shore v. Estate of Baum, 84 N.J. 137, 417 A.2d 1003 (1980) 3-4

New York Times Company v. Sullivan, 376 U.S. 254, 84 S.Ct. 710 (1964) 3-4

Planned Parenthood of S.E. Pa. v. Casey, ___ U.S. ___ (1992) (Slip Op.) 10, 19

Raleigh Fitkin-Paul Morgan Memorial Hospital v. Anderson, 422 N.J. 421, 201 A.2d 537 (1964) 2

Roe v. Wade, 410 U.S. 113, 93 S.Ct. 705 (1973) 1-2, 5, 15, 19-20

Shelly v. Kraemer, 334 U.S. 117, 68 S.Ct. 836 (1948) . . 3-4

Smith v. Brennan, 31 N.J. 353, 157 A.2d 497 (1960) 2

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ARGUMENT

POINT I

THE COURT HAS JURISDICTION OVER THIS CASE. J.M., AS GUARDIAN, REPRESENTS A PERSON IN FACT ENTITLED TO ACCESS TO THE COURT. THE ORDERS OF THE NEW JERSEY COURTS CONSTITUTE STATE ACTION.

The respondent argues that the Court lacks jurisdiction for "three reasons." Res.Br. at 1-9. The first (lack of finality) is directed only to J.M., individually, and is therefore not addressed in this brief.[1] Upon the other points, the guardian briefly comments.

A. THE CHILD IS A PERSON IN FACT AND THE COURT HAS JURISDICTION TO DECIDE THE CHILD'S RIGHTS.

V.C. argues that the Court lacks jurisdiction to review its own decision in *Roe* because that Court accepted jurisdiction and ruled that a child does not have rights under the Fourteenth Amendment prior to birth. Res. Br. at 6-8. The unmeritorious nature of a proposition is rarely so self evident. That the Court previously held that a class of litigants does not enjoy a specific constitutional right does not mean that a member of that class is forever denied

[1] Respondent states she does not understand why two petitions were filed. Res. Br. at 1. First, there are two separate individuals with distinctly different rights. Equally important, V.C. argues that a lack of finality of the order in J.M.'s individual case deprives the Court of jurisdiction under 28 U.S.C.B. §1257(a). If V.C. is correct (we think not) the guardian's petition was required to be filed separately. S.Ct. R. 12.2.

access to the Court itself.

The New Jersey Supreme Court has long recognized, as a matter of law, that an unborn child is a separate person from the child's mother. *Smith v. Brennan*, 31 N.J. 353, 367, 157 A.2d 497 (1960) (stating that "an unborn child is a distinct biological entity from the time of conception"). That Court has also ruled that it is proper procedure to appoint a guardian ad litem even if the child is unborn, for the purpose of protecting the child's health. *Raleigh Fitkin-Paul Morgan Memorial Hospital v. Anderson*, 42 N.J. 421, 423, 201 A.2d 537 (1964). If the child is in fact a human being, and New Jersey recognizes the propriety of appointing a guardian ad litem to seek protection of the child through the courts, then it would have to be the respondent's position that *Roe* actually held that the child is not a person in fact. But *Roe* stated that the Court could not make a determination on this very point. *Roe v. Wade*, 410 U.S. 113, 159, 93 S.Ct. 705, 730 (1973). J.M. suggests this case presents the best opportunity for the Court to review this question, especially since V.C. insists the Court's very jurisdiction depends upon it.

It is ironic that respondent raises this argument in this case because J.M. strenuously sought a hearing to provide a record and

findings on this very fact (see comments of the trial judge who urged that the facts relevant to the nature of the life of the unborn child be established. (Pet. Ap. Vol. I at 81-85). All of the scientific evidence available suggests that the unborn child is a human being, a person. *See* Pet. at 31-56; *see also* discussion below at 4-18. The Court should grant certiorari, determine that the child is a human being in fact, and review the child's constitutional rights.

B. THE ORDERS OF THE NEW JERSEY COURT THAT FAILED TO RECOGNIZE THE CONSTITUTIONAL RIGHTS OF THE CHILD AND GUARDIAN CONSTITUTE STATE ACTION.

The respondent offers a novel proposition of law: when J.M. filed a complaint with New Jersey's judicial branch of government seeking an order to resolve a dispute between J.M. and V.C., New Jersey was required to enforce the federal constitutional rights of V.C., but prohibited from considering those of the child or those of the father. It is well established that any order issued by the judicial branch of state government constitutes state action. *New York Times Company v. Sullivan*, 376 U.S. 254, 265, 84 S.Ct. 710, 718 (1964); *Shelly v. Kraemer*, 334 U.S. 117, 68 S.Ct. 836, 844 (1948); *Jersey Shore v. Estate of Baum*, 84 N.J. 137, 144-145, 417 A.2d 1003 (1980). The same argument advanced by the respondent in this case was rejected by the *Sullivan* Court:

> Although this is a civil law suit between private parties, the Alabama courts have applied a state rule of law which petitioners claim to impose invalid restrictions on their constitutional freedoms ... It matters not that that law has been applied in a civil action and that it is common law only ... The test is not the form in which state power has been applied, but, whatever the form, whether such power has in fact been exercised. *Id.* at 265.

Similarly, the matter in *Shelly v. Kraemer, supra*, was a civil suit between two private citizens. The principle was well explained in *Jersey Shore v. State of Baum, supra.*: the issuance of an order constitutes state action and any order which advances private conduct is subject to constitutional scrutiny. *Id.* at 144-145.

POINT II

THERE IS A CONSENSUS WITHIN THE SCIENTIFIC AND MEDICAL COMMUNITIES CONCERNING THE BIOLOGICAL AND GENETIC FACTS WHICH ARE PERTINENT TO WHEN THE BIOLOGICAL LIFE OF A PERSON BEGINS. IT IS NOW KNOWN THAT FULL CORTICAL DEVELOPMENT IS NOT NECESSARY FOR THE CHILD TO EXPERIENCE PAIN PRIOR TO BIRTH - THE EVIDENCE SUPPORTS THE CONCLUSION THAT THE UNBORN CHILD, PRIOR TO BIRTH EXPERIENCES PAIN LONG BEFORE THE TWENTY-FIFTH WEEK OF LIFE.

The respondent claims to support her contention that the Court should not grant certiorari to reexamine whether the child enjoys constitutional rights prior to birth, that, "there is no consensus in the scientific community that life begins at conception." Res Br. at 26. Respondent relies upon an affidavit which sets forth this

conclusory statement, and recites what is purported to be scientific "facts", including that:

> The thalamocortical connections which are prerequisites for neocortical reception of bodily sensation do not begin to develop until approximately 22 or 23 weeks. Res. Ap. at 9a.

The statement concerning a lack of scientific consensus is intended to argue that the truth about human life cannot be determined, and therefore, no attempt should be made. The statement about the neocortical reception is an argument that the unborn child cannot experience pain before the twenty-second or twenty-third week of age, and therefore, should not be protected before that point. Both of these claims are false, and the incorrect nature of these assumptions serve to demonstrate the validity of petitioner's point that the time has arrived for a reexamination of the underlying question of *Roe* (when life begins).

A. <u>THERE IS A CONSENSUS WITHIN THE SCIENTIFIC AND MEDICAL COMMUNITIES CONCERNING THE CRITICAL BIOLOGICAL AND GENETIC FACTS WHICH ARE PERTINENT TO WHEN THE LIFE OF A PERSON BEGINS.</u>

Respondent relies upon an affidavit of one Michael V.L. Bennett, dated May 15, 1990, to support her contention that there is no consensus that life begins at conception. Res. Br. at 26. This affidavit relies upon testimony of Dr. Leon Rosenberg and Dr.

Joseph Boyle given eleven years ago in 1981 before the Subcommittee on Separation of Powers of the Judiciary Committee of the U.S. Senate (Human Life Bill, S. 158, 97th Cong., 1st Sess.).

While the lack of consensus among members of the scientific and medical communities concerning the statement "life begins at conception" is irrelevant (*see* Petition p. 23-25), it is pertinent that there is no serious dispute or lack of consensus concerning the important scientific and medical facts relevant to when life begins. It is appropriate to first examine the respondent's statement and then examine the consensus on the facts.

Respondent relies on Dr. Rosenberg's 1981 statements to support the contention that there is no scientific consensus on when life begins. Res. Ap. at 5a, 6a. Respondent, however, avoids mention of the fact that the subcommittee, before whom Dr. Rosenberg testified, published a report which specifically found, as a matter of scientific fact, that life begins at conception:

> The testimony of these witnesses and the voluminous submissions received by the subcommittee demonstrate that contemporary scientific evidence points to a clear conclusion: life of a human being begins at conception ... today the facts are beyond dispute.
>
> Physicians, biologists, and other scientists agree that conception marks the beginning of the life of a human being ... there is overwhelming agreement on this point in countless

medical, biological, and scientific writings.[2]

Further, the report singled out Dr. Rosenberg for comment, observing:

> It may at first seem difficult to reconcile how the existence of such a broad consensus with the testimony of some witnesses opposing S-158 before the Subcommittee who emphatically denied that it is possible to determine when a human life begins. If the facts are so clear, it is crucial to understand how, for example, one like (Dr. Leon Rosenberg) could say that he knows of no scientific evidence that shows when actual human life exists.
>
> Such statements appear on the surface to present a direct contradiction to the biological evidence discussed above. The explanation of this apparent contradiction lies in existence of the two distinct questions identified above, the scientific question and the value question. We must consider not only whether unborn children are human beings, but also whether to accord their lives intrinsic worth and value equal to those of other human beings. The two questions are separate and distinct. It is a scientific question whether an unborn child is a human being, in the sense of a living member of the human species. It is a value question whether the life of an unborn child has intrinsic worth and equal value with other human beings.
>
> Those witnesses who testified that science cannot say whether unborn children are human beings were speaking in every instance to the value question rather than the scientific question. No witness raised any evidence to refute the biological fact that from the moment of human conception there exists a distinct individual being who is alive and is of the human species. No witness challenged the scientific consensus that unborn children are 'human beings', insofar as the term is used to mean

[2] Report on Human Life Bill, Subcommittee on Separation of Powers, Committee on the Judiciary United States Senate (97th Cong., 1st Sess. 1981) p. 7.

living beings of the human species.[3]

The Subcommittee report identifies Dr. Rosenberg, by name, as one who adopted an unreal and untruthful approach to the question by deciding that whether the unborn child is not a person is simply a matter of definition, not a question of fact, and the definition can be defined anyway one wishes [without regard to fact]. Only by adopting this approach could Dr. Rosenberg state that he "knows of no scientific evidence showing when actual human life exists." The Subcommittee noted that "he was speaking only to the value questions ...".[4] (*see* Petition, at 23-25).

The petitioner has searched the literature with the aid of medical and scientific experts, and is unable to find a single modern reference in the scientific literature which refutes the statement that humans are genetically distinct and complete from their parents at the moment of conception, and that they are anything other than human. The scientific literature is replete with clear statements that human life begins at conception.[5]

[3] Report on Human Life Bill, *supra*, at 10, 11.

[4] Report on Human Life Bill, *supra* at 11, 12.

[5] Petitioner has compiled a partial list of quotations from scientific and medical journals that make the clear statement that life begins at conception. The list is found at the end of this brief and entitled "Appendix A."

B. IT IS NOW KNOWN THAT FULL CORTICAL DEVELOPMENT IS NOT NECESSARY FOR THE CHILD TO EXPERIENCE AND RESPOND TO PAIN PRIOR TO BIRTH - THE EVIDENCE SUPPORTS THE CONCLUSION THAT THE UNBORN CHILD EXPERIENCES PAIN LONG BEFORE THE TWENTY-FIFTH WEEK OF LIFE.

Citing an old study, respondent claims that thalamocortical connections are "prerequisites" for neocortical reception of body sensation and these do not begin to develop until the unborn child is 22 or 23 weeks old[6]. This statement underscores two of the reasons why J.M.'s petition should be granted. First, even the respondent must concede that all that is necessary for a person to experience pain is present from the 22nd to the 28th week of life. No current authority can suggest otherwise. That a child could be subjected to a painful death for no valid reason under circumstances where the State of New Jersey refuses to exercise its power to protect the child demonstrates the need for the Court to reexamine the child's individual rights. Second, the statement is false and relies upon old assumptions no longer valid. A child does not need a fully developed cortex to experience pain (discussion below). The current evidence is consistent with the conclusion that the child experiences pain as early as the 6th to 11th week of age.

[6] Res. Ap. at 9a.

The availability of new knowledge requires a reexamination of the child's rights. *See Burnet v. Coronado Oil & Gas Company*, 285 U.S. 393, 405-413 (Brandeis, J., dissenting); *Planned Parenthood of S.E. Pa. v. Casey*, ___ U.S. ___, Slip Op. at 12 ("facts have so changed or come to be seen so differently, as to have robbed the old rule of significant application or justification"); *see also* Petition of J.M., G.A.L., at 28-57; Sup. Br. at 17-20.

1. CORDICAL DEVELOPMENT IS NOT NECESSSARY TO EXPERIENCE PAIN.

The responuent contends that cortical synapses and thalamolcortical connections are a prerequisite for neocortical reception of body reactions. Res. Ap. at 9a. It is well known, however, that the human brain does not reach complete development until adulthood.[7] It was recently discovered that the same behaviors of newborns are clearly present in children with anencephaly (children born without developed cortex).[8] Previously, their behaviors have erroneously been ascribed to cerebral hemispheric activity[9]

[7] Lagercrantz, H.; and Forssberg, H. "Functional Development of the Brain in the Fetus and Infant." *Lakartidningen* 88 (1991): 1880-1885.

[8] The Medical Task Force on Anencephaly, (Stumpf, D.A., et al.) "The Infant with Anencephaly" *N Eng J Med* 322(1990): 669-674.

[9] *Id.*

(including activity described by respondent as needed for neocortical reception of body sensations).

Anacephalic children are born without a cerebral cortex.[10] Their expected post birth lifespan ranges from a few hours to a few months.[11] During their post birth lives these children breath spontaneously and have a grasp response.[12] They respond to noxious stimuli known to cause pain by avoidance, by withdrawal and by crying.[13] They breath, cough, hiccup, smile, grimace, yawn and suck. In a recent study of twelve anencephalic infants, all twelve responded to pain, all had an exaggerated sustained response to touch, all twelve evidenced spontaneous movement,

[10] Shewmon, D.A.; Capron, A.M.; Peacock, W.J.; and Schulman, B.L. "The Use of Anencephalic Infants as Organ Sources: A Critique." *JAMA* 261(1989): 1773-1781.

[11] Stumpf, D.A., Chair of Medical Task Force on Anencephaly "The Infant With Anencephaly." *N Eng J Med* 322(1990): 669-674.

[12] Ashwal, S.; Peabody, J.L.; Schneider, S.; Tomasi, L.G.; Emery, J.R.; and Peckham, N. "Anencephaly: Clinical Determination of Brian Death and Neuropathologic Studies." *Pediatr Neurol* 6(1990): 233-239.

[13] Stumpf, D.A., Chair of Medical Task Force on Anencephaly. "The Infant With Anencephaly." *N Eng J Med* 322(1990): 669-674. Shewman, D.A.; Capron, A.M.; Peacock, W.J.; and Schulman, B.L. "The Use of Anencephalic Infants as Organ Sources: A Critique." *JAMA* 261(1989): 1773-1781. Van Assche, F.A. "Anencephalics as Organ Donors." *Am J Obstet Gynecol* 163(1990): 599-600. Ashwal, S.; Peabody, J.L.; Schneider, S.; Tomasi, L.G.; Emery, J.R.; and Peckham, N. "Anencephaly: Clinical Determination of Brain Death and Neuropathologic Studies." *Pediatr Neurol* 6(1990): 233-239.

and all twelve breathed spontaneously.[14] Additionally, seven of the twelve responded to a stimulation at their mouth towards the stimulus (rooting response) and seven of the twelve had a sucking response.[15] Spontaneous movement in the fetus begins between six and seven and one-half weeks gestation.[16] Stimulation of the mouth area resulting in a response towards the stimulus is seen in the child at 9 weeks gestation and sucking is present at 11 weeks gestation.[17] Based upon these behaviors and their incidence in this study, one can conclude that the fetus at 6 to 11 weeks gestation is neurologically developed to a point at least equivalent to the twelve anencephalic children described above. They are all capable of experiencing pain.

2. <u>THE NEED TO RELIEVE PAIN DURING FETAL SURGERY.</u>

Since 1981, fetal surgery has become a reality. Both mother and fetus are anesthetized, the mother's abdomen surgically

[14] Ashwal, S.; Peabody, J.L.; Schneider, S.; Tomasi, L.G.; Emery, J.R.; and Peckham, N. "Anencephaly: Clinical Determination of Brain Death and Neuropathologic Studies." *Pediatr Neurol* 6(1990): 233-239.

[15] *Id.*

[16] de Vries, J.I.P.; Visser, G.H.A.; and Prechtl, H.F.R. "The Emergence of Fetal Behavior. I. Qualitative Aspects." *Early Hum Dev* 7(1982): 301-322. Flower, M.J. "Neomaturation of the Human Fetus." *J Med & Phil* 10(1985): 237-251.

[17] Flower, M.J. "Neomaturation of the Human Fetus." *J Med & Phil* 10(1985): 237-251.

opened and the uterus incisioned. While still attached to the umbilical cord, amniotic fluid is drained off, and "the surgeon removes the fetus' left arm from the uterus and attaches specially designed fetal monitors."[18] The baby is incised surgically, repaired, and is placed back into the mother's uterus. Fetal heart rate and oxygen saturation monitoring is a norm in these procedures.[19] After surgery, the child can proceed through pregnancy to, at, or near full term.[20]

It is common practice to monitor fetal vital signs and to give the fetus anesthesia.[21] "Although the mother is anesthetized for fetal

[18] Levine, A.H. "Fetal Surgery." *Aorn*, 54(1991): 17-19, 22-27, 30-32, at p. 30.

[19] Harrison, M.R.; Langer, J.C.; Adzick, N.S.; Golbus, M.S.; Filly, R.A.; Anderson, R.L.; Rosen, M.A.; Callen, P.W.; Goldstein, R.G.; and deLorimier, A.A. "Correction of Congenital Diaphragmatic Hernia In Utero, V. Initial Clinical Experience." J Pediatric Surg 25(1990):47-57, at p. 49.

[20] Nathanson 52a. Strickland, R.A.; Oliver, W.C.; Chantigian, R.C.; Ney, J.A.; and Davidson, G.K. "Anesthesia, Cardiopulmonary Bypass, and the Pregnant Patient." *Mayo Clin Proc* 66(1991): 411-429, at p. 413.

[21] Levine, A.H. "Fetal Surgery." *Aorn J*, 54(1991): 17-19, 22-27, 30-32, at p. 30. Harrison, M.R.; Adzick, N.S.; Longuker, M.T.; Goldberg, J.D.; Rosen, M.A.; Filly, R.H.; Evans, M.I.; and Golbos, M.S. "Successful Repair in Utero of a Fetal Diaphragmatic Hernia After Removal of Herniated Viscera from the Left Thorax." *N Eng J Med* 322(1990): 1582-1584, at p. 1582. Strickland, R.A.; Oliver, W.C.; Chantigian, R.C.; Ney, J.A.; and Davidson, G.K. "Anesthesia, Cardiopulmonary Bypass, and the Pregnant Patient." *Mayo Clin Proc* 66(1991): 411-429, at pp. 414-415. Longaker, M.T.; Golbus, M.S.; Filly, R.A.; Rosen, M.A.; Chang, S.W.; and Harrison, M.R. "Maternal Outcome After Open Fetal Surgery." *JAMA* 265(1991): 737-741, at p. 737. Harrison, M.R.; Golbus, M.S.; Filly, R.A.; Anderson, R.L.; Flake, A.W.; Rosen, M.; and Huff, R.W. "Fetal Hydronephrosis: Selection and Surgical Repair." *J Pediatr Surg* 22(1987): 556-558, at p. 556. Rosen, M. "Anesthesia and Monitoring for Fetal Intervention" In *The Unborn*

surgery, the fetus becomes the prime target for the anesthesia."[22] "For fetal surgery, unlike maternal surgery, the fetus is not an innocent bystander for whom we attempt the least anesthetic interference. Instead, the fetus is the primary patient, requiring safe administration of anesthesia and close monitoring of anesthetic effects to ensure well being."[23] Studies indicate that performing surgery on unanesthetized fetuses results in automic nervous system stimulation, increased hormonal activity, increased motor activity, and variations in heart rate.[24] Fetal surgery is feasible on an ill patient as early as 18 weeks gestation.[25]

3. ASSUMPTIONS ABOUT PAIN

It was only in the last decade that the traditional concept accepted at the time of *Roe*, that even normal neonates cannot feel

Patient 2nd ed., edited by M.R. Harrison 172-181. Philadelphia: W.B. Saunders Co., 1991, at p. 176.

[22] Levine, A.H. "Fetal Surgery." *Aorn J*, 54(1991): 17-19, 22-27, 30-32, at p. 27.

[23] Rosen, M. "Anesthesia and Monitoring for Fetal Intervention" In *The Unborn Patient* 2nd ed., edited by M.R. Harrison 172-181. Philadelphia: W.B. Saunders Co., 1991, at p. 176.

[24] Levine, A.H. "Fetal Surgery." *Aorn J*, 54(1991): 17-19, 22-27, 30-32, at p. 27. Rosen, M. "Anesthesia and Monitoring for Fetal Intervention" In *The Unborn Patient* 2nd ed., edited by M.R. Harrison 172-181. Philadelphia: W.B. Saunders Co., 1991, at p. 176.

[25] Harrison, M.; and Adzick, N.S. "The Fetus as a Patient." *Ann Sur* 213(1991): 279-291, at p. 281.

pain, was challenged.[26] It had been assumed by the medical community that a fully developed and mature cortical brain region was necessary for pain perception. This assumption, it became clear, was inconsistent with the observations of care givers for premature infants.[27] It has been documented that endocrine and metabolic responses associated with pain are abolished by giving anesthesia to preterm neonates[28], and to the fetus.[29] A recent analysis of pain experiences in adults reached the conclusion that the classical view of the nervous system as a hard wired system

[26] Fitzgerald, M.; and McIntosh, N. "Pain and Analgesia in the Newborn." *Arch Dis Child* 64(1989): 441-443, at p. 441.

[27] One of whom stated eloquently,

> "It has generally been assumed that the ability of a child to feel pain increases with age and that neonates may not perceive pain or may perceive it only minimally. Assumed by whom? Certainly not by those of us at the bedside of critically ill infants, who see them flinch from procedures, startle in response to loud noises, and turn from bright lights and various other forms of stimulation. Not by those who have heard infants' anguished cries and seen their vigorous withdrawals from painful stimuli. Not by those who have observed their increased heart and respiratory rates and profuse sweating in response to heel sticks or circumcision. And finally, not by those who have seen babies gasp for every breath as they die from incurable lung disease."

Fletcher, A.B. "Pain in the Neonate." *N Eng J Med* 317(1987): 1347-1348, at p. 1347.

[28] Scanlon, J.W.; "Appreciating Neonatal Pain." *Adv Pediatr* 38(1991): 317-333, at p. 320. Rosen, M.A. "Anesthesia for Procedures Involving the Fetus." *Semin Perinatol* 15(1991): 410-417, at p. 431.

[29] Levine, A.H. (1991), Fetal Surgery, *Aorn J*, V54(1): 16-19, 22-27, 30-32, at p. 27. Rosen, M. "Anesthesia and Monitoring for Fetal Intervention" In *The Unborn Patient* 2nd ed., (1991), Harrison (editors), W.B. Saunders Co. p. 176, at p. 176.

projecting from nociceptors (pain detecting nerves) to the thalamus and then to the cortex cannot explain all pain experiences.[30]

A New England Journal of Medicine editorial stated:

> Any decision to withhold anesthetic agents ought not to be based on the infant's age or *perceived degree of cortical maturity*; it should be based upon the same criteria used in older patients."[31] (Emphasis added).

Neocortex development actually begins at eight weeks gestation and the child has all its neurons by twenty weeks.[32] Until recently, pain perception was presumed to require myelinated nerve fibers.[33] This has been disproven even in the case of adults.[34] Both myelinated and unmyelinated nerve fibers transmit

[30] Wall, P.D. "The Biological Function and Dysfunction of Different Pain Mechanisms." In *Advances in Pain Research and Thereapy*. Edited by F. Sicuteri, (20:19-28). New York: Raven Press, 1992, at p. 19.

[31] Fletcher, A.B. "Pain in the Neonate." *N Eng J Med* 317(1987): 1347-1348, at p. 1348.

[32] Marin-Padilla, M. "Structural Organization of the Human Cerebral Cortex Prior to the Appearance of the Cortical Plate." *Anat Embryol* 166(1983): 21-40, at p. 21.

[33] Clark, J., ed. *The Nervous System: Circuits of Communication. The Human Body*. Torstar Books, Inc., 1985, p. 109. Myelin is the fatty substance that makes up the sheath around many nerve fibers.

[34] Anand, K.J.S.; and Hickey, P.R. "Pain and Its Effects in the Human Neonate and Fetus." *N Engl J Med* 317(1987): 1321-1329, at p. 1322. Casey, K.L. "Neural Mechanisms of Pain: An Overview." *Acta Anaesthesiol Scand* Suppl 74(1982): 13-20, at 13.

pain.[35] Most fibers of the nervous system of a newborn full term infant are not myelinated until two years after birth when the spinal cord, brainstem, and cerebellum are finally myelinated.[36]

Using modern techniques that were used to identify different types of nerve synapses, as well as different types of neurotransmitters, in samples taken from an 8 to 37 week old fetus[37] it is concluded that the morphological substrate (the necessary pieces) for nociception (pain detection) in the spinal cord exists at very early developmental stages. At seven weeks gestation cutaneous sensory receptors appear in the fetus. This development is preceded by the development of synapses or junctions between sensory nerve fibers and interneurons of the spinal cord.[38] As early as the end of the 1st trimester, the thalamus, third ventricle,

[35] Anand, K.J.S.; and Hickey, P.R. "Pain and Its Effects in the Human Neonate and Fetus." *N Engl J Med* 317(1987): 1321-1329, at p. 1322.

[36] Clark, J., ed. *The Nervous System: Circuits of Communication. The Human Body*. Torstar Books, Inc., 1985, p. 109.

> "Even when mature, most peripheral pain fibers are unmyelinated or, at best, thinly myelinated, lack of myelination cannot be used as a valid argument to deny pain appreciation in the newborn."

Scanlon, J.W.; "Appreciating Neonatal Pain." *Adv Pediatr* 38(1991): 317-333, at p. 320.

[37] Rizvi, T.; Wadhwa, S.; and Bijiani, V. "Development of Spinal Substrate for Nociception" *Pain 4(1987-suppl.): S195.*

[38] Anand, K.J.S.; and Hickey, P.R. "Pain and Its Effects in the Human Neonate and Fetus." *N Engl J Med* 317(1987): 1321-1329, at p. 1322.

midbrain, brain stem, and cerebellar hemispheres are developed and their appearance, besides physical size, will go unchanged throughout the rest of fetal development.[39] A basic sensory response loop is present extremely early in human development. It is noteworthy that, with ultrasound, we can observe movement by the fetus always from outside stimulation by the eighth week.[40] Brain function, as detected by electroencephalography, is present at eight weeks gestation.[41]

POINT III

THE COURT SHOULD GRANT CERTIORARI TO DETERMINE IF A CHILD, WHILE UNBORN, ENJOYS FOURTEENTH AMENDMENT RIGHTS.

Respondent mischaracterizes much of J.M.'s argument. Res. Br. 21-25. The new technology which has revolutionized the way mankind learns, and which has resulted in new information concerning the nature of the child before birth, requires the review of *Roe's* holding that a child does not enjoy rights until after birth (*see*

[39] Filly, R.A. "Sonographic Anatomy of the Normal Fetus" In *The Unborn Patient* 2nd ed., edited by M.R. Harrison et al., 92-130, Philadelphia: W.B. Saunders Co., 1991, at p. 122.

[40] Flower, M.J. "Neuromaturation of the Human Fetus." *J Med Philos* 10(1988): 237-351.

[41] Goldenring, J.M. "Development of the Fetal Brain." *N Eng J Med* 307(1982): 564, at p. 564.

Petition pp. 28-56; Sup.Br. pp. 16-20; discussion above at 9-18). C.f. *Burnet v. Coronado Oil*, U.S. 393, 405-413 (1932) (Brandeis, J., dissenting); *Casey*, at 12. By any understanding a child 25 weeks post conception is a person. The life of that person begins at conception when the essence of a human being is complete. There can be no requirement that the individual person be perfect or mature to be considered a human being. That a child must enjoy constitutional rights prior to birth is an inference based upon the obvious and inherent contradiction which would result if the Equal Protection clause were interpreted to protect some people, but not all (*see* Pet. at pp. 20-25).

The decision of the New Jersey Supreme Court in this case is indeed inconsistent with the prior decisions of the U.S. Supreme Court (see Pet. and Sup. Br. of J.M., individually). That the decision in *Roe* itself supports the child's rights underscores the inherent contradiction and error of *Roe*. *Snapp v. Puerto Rico*, 458 U.S. 592 (1982) explains that a state cannot have a *parens patriae* power without the child having its own rights. That a state may have a coexisting right independent of a particular person under certain circumstances is not inconsistent with the requirement that the state can only have a power that is either derivative of the

individual's rights, or coexistent with them. In *Snapp* the Court reviewed the question whether a state can maintain a court action on behalf of an individual, holding that a state could not maintain such an action if the individual is identifiable. *Id.*, at 607. Thus, New Jersey, which has the power to protect the child before birth, could not have maintained this action because the child was identifiable. Therefore, the only person who could maintain this action was the child through a court appointed guardian.

CONCLUSION

The court should grant certiorari. The new scientific and medical information justifies the recognition of the child's rights and public understanding of the true facts will result in public acceptance of a Court decision overruling *Roe*.

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Counsel of Record

APPENDIX A

AUTHORITIES WHICH CONCUR
THAT LIFE BEGINS AT CONCEPTION

1. Munsinger, H. *Fundamentals of Child Development* 2nd ed. New York: Holt, Rinehart, and Winston, Inc., 1975.

   "Human life begins at Conception." p. 4

   "Human life begins when one of many available sperm from a male succeeds in penetrating the wall of an ovum (egg) inside the female. The combination of material from the two parents, which determines what characteristics the new individual will inherit, begins a complicated sequence of development which will one day produce a mature human adult." p. 4

   "Mendel assumed that a full set of genes comes from each parent as part of the fertilized egg (the zygote). This double set of genes is the genotype, the hereditary make up of the new individual." p. 42

2. Harlock, E.B. *Child Development* 6th ed. McGraw-Hill, Inc., 1978.

   "Life begins at the moment of conception - the time when a female reproductive cell, the ovum (plural, ova), is fertilized by a male reproductive cell, the spermatozoon (plural, spermatozoa)." p. 51

   "The first important condition occurring at the time of conception, when the ovum is fertilized by the spermatozoon, is the determination of the newly created individual's hereditary endowment. When the sperm unites with the ovum, everything the newly conceived individual will ever inherit from parents, grandparents, and other more remote ancestors is set." p 53

   "After conception, nothing can be done to add to, or subtract from, the individual's hereditary endowment." p 54

3. Pikunas, J. *Human Development: An Emergent Science*. McGraw-Hill, Inc., 1976.

"The union of ovum and sperm nuclei defines the hereditary endowment." p. 111

"The development of the child begins at conception, about nine months before birth." p. 111

4. Schuster, S.h.; and Asburn, S.S. *The Process of Human Development: A Holistic Life-Span Approach* 2nd ed. Boston: Little, Brown, and Company, 1986.

"Each individual begins life as a single cell that is formed by the union of two gametes - a sperm and an ovum (egg)." p. 50

"Characteristics are inherited according to specific laws, and the possibility of their occurrence in a new individual can be predicted." p. 58-59

5. Lugo, J.O.; and Hershey, G.L. *Human Development: A Multi-Disciplinary Approach to the Psychology of Individual Growth*. New York: Macmillan Publishing Co., Inc., 1974.

"The growth of every human being begins with a special cell, the fertilized ovum. Although the diameter of the ovum is approximately 1/175 of an inch and its weight is about one 20-millionth of an ounce, all the genetic potentialities for the complete development of a human being are contained within it. From this microscopically small cell, a baby composed of about 200 billion cells of different kinds will develop during the next nine months. This striking phenomenon of growth is common in all human beings." p. 242

6. Bernard, H.W. *Human Development in Western Culture* 4th ed. Boston: Allyn & Bacon, Inc., 1975.

"The life of a given individual begins when the sperm (male cell) penetrates the ovum (female cell)." p. 37

"Whatever biological potential is received from parents crosses this narrow hereditary bridge at the moment of conception." p. 40

7. Strand, F.L. *Physiology: A Regulatory Systems Approach*. New York: Macmillan Publishing Company, Inc., 1978.

"The instant of fusion of the sperm nucleus with that of the ovum initiates a fascinatingly complex series of reactions which ultimately are designed to bring to full development an individual of the same species as the parents, bearing all the characteristics of his progenitors but individually different in a multitude of small ways. At this important instant, the genetic sex has also been determined." p. 542

"The cell has formed a new, mature individual, and we have come full cycle." p. 542

8. Jennett, S. *Human Physiology*. New York: Churchill Livingstone, 1989.

"The life of an individual begins at conception, the fertilization of an ovum by a spermatozoon." p. 409

9. Kaluger, G.; and Kaluger, M. *Human Development: The Span of Life*. St. Louis: The C.V. Mosby Company, 1974.

"In that fraction of a second when the chromosomes form pairs, the sex of the new child will be determined, hereditary characteristics received from each parent will be set, and a new life will have begun." pp. 28-29

10. Mussen, P.H.; Conger, J.J.; and Kagan, J. *Child Development and Personality* 5th ed. New York: Harper & Row, 1979.

"The life of each individual begins when a sperm cell from the father penetrates the wall of an ovum, or egg, from the mother." p. 52

"Life begins at conception. But what of the forces that, throughout the individual's existence, will influence his or her development? When do they begin? The answer, again, is at conception. At the moment that the tiny tadpole-shaped

sperm penetrates the wall of the ovum, it releases 23 minute particles called chromosomes. At approximately the same time, the nucleus, the inner core of the ovum, breaks up, releasing 23 chromosomes of its own." pp. 52-53

"This process is of great interest to us because it has been established through painstaking research that these chromosomes, which are further subdivided into even smaller particles called genes, are the carriers of the child's heredity. All the child's biological heritage from the father and mother is contained in these 46 chromosomes." p. 53

11. Moore, K. *Before We Are Born* 3rd ed. Philadelphia: W.B. Saunders Company, 1989.

"Human development begins at fertilization when a male gamete or sperm fuses with a female gamete or ovum to form a zygote. The zygote is the first cell of a new human being." p. 25

"The male and female pronuclei fuse and the maternal and paternal chromosomes intermingle. The new diploid cell is called a zygote. It is the primordium of a human being." pp. 25-26

"Fusion of the two haploid gametes or germ cells (each with 23 chromosomes) produces a zygote, which is a diploid cell with 46 chromosomes, the normal number for the human species." p. 26

"Because half the chromosomes in the zygote come from the mother and the other half from the father, the zygote contains a new combination of chromosomes that differs from that of either of the parents. Consequently, fertilization forms the basis of biparental inheritance and ensures variation of the human species." p. 26

"The embryos chromosomal sex is determined at fertilization by the kind of sperm that fertilizes the ovum." p. 28

"Hence, it is the father rather than the mother whose gamete determines the sex of the embryo." p. 28

"Fertilization of the ovum by a sperm also initiates early human development by stimulating the zygote to undergo mitotic cell division or cleavage into two cells called blastomeres." p. 28

"Fertilization of the ovum usually occurs in the ampulla of the uterine tube. The process is complete when the haploid male and female pronuclei of the sperm and ovum, respectively, fuse to form a zygote. This diploid cell is the beginning of a new human being." p. 31

12. Mader, S.S. *Inquiry into Life*. Dobuque, Iowa: Wm. C. Brown Company Publishers, 1976.

"Each gamete, you'll recall, contains the haploid number of chromosomes, and the fertilized egg, or zygote, contains the diploid number of chromosomes as the new individual now begins development." p. 433 (emphasis added)

13. Thibodeau, G. *Anatomy and Physiology*. St. Louis: Times Mirror/Mosby College Publishing, 1987.

"Half of the 46 chromosomes in the zygote nucleus have come from the sperm and half from the ovum. Since chromosomes are composed of genes, the new being inherits half of its genes and the characteristics they determine from its father and half from its mother. Genetically, the zygote is complete. Time and nourishment are all that is needed for expression of those characteristics such as sex, body build, and skin color that were determined at fertilization." p. __

14. Anthony C.P.; and Kolthoff, N.J. *Textbook of Anatomy and Physiology* 9th ed. St. Louis: the C.V. Mosby Company, 1975.

"The sperm head then forms itself into a nucleus that approaches and eventually fuses with the nucleus of the ovum, producing, at that moment, a new single-celled individual or zygote. Half of the 46 chromosomes in the zygote nucleus have come from the sperm and half from the ovum. Since chromosomes are composed of genes, the new being inherits half of its genes and the characteristics they determine from its father and half from its mother." p. 500

15. Crouch, J.E. *Functional Human Anatomy* 4th ed. Philadelphia: Lea & Febiger, 1985.

"Development is a continuous process from conception (the fertilization of the ovum) to the death of the individual. For purposes of discussion, human development may be divided into two periods, prenatal development or embryology and postnatal development." p. 31

16. Turner, J.S.; and Helms, D.B. *Lifespan Developmental* 2nd ed. CBS College Publishing (Hold, Rinehart, and Winston), 1983.

"Yet far more remarkable than the birth itself is the process whereby a single fertilized egg develops into a fully functioning infant - complete with arms, legs, nose, eyes, ears, internal organs, and an individuality all of its own. The key to this magnificent story is a special code contained in the nucleus of a cell. This code, unique and different for every individual, is just now becoming understood by scientists." p. 52

"Each species of plant and animal and every individual within a species has a full set of directions locked inside its nucleus. This is what makes a mouse different from a bird, a flower different from a tree, and siblings different from each other." p. 52

"A zygote (a single fertilized egg cell) represents the onset of pregnancy and the genesis of a new life." p. 53

17. Scarr, S.; Weinberg, R.A.; and Levine A. *Understanding Development*. Harcourt Brace Jovanovich, Inc., 1986.

"The development of a new human being begins when a male's sperm pierces the cell membrane of a female's ovum, or egg." p. 86

"The villi become the placenta, which will nourish the developing infant for the next eight and a half months." p. 86

18. Craig, G. *Human Development* 4th ed. Englewood Cliffs, NJ: Prentice-Hall, 1986.

"Human development begins at the moment of conception." p. 57

"Here, we will look at the process of fertilization that marks the beginning of the life cycle of a human being." p. 57

19. DeCoursey, R.M. *The Human Organism* 4th ed. McGraw-Hill, Inc., 1974.

"The zygote therefore contains a new arrangement of genes on the chromosomes never before duplicated in any other individual. The offspring destined to develop from the fertilized ovum will have a genetic constitution different from that of either parent and from anyone else in the world." p. 584

20. Fitzgerald, H.E.; Strommen, E.A.; and McKinney, J.P. *Developmental Psychology: The Infant and Young Child.* Homewood, IL: The Dorsey Press, 1977.

"In the normal human being, each cell is diploid, which means that it contains pairs of chromosomes - 23 pairs, or a total of 46 chromosomes." ... "Each parent contributes one half of the chromosomes complement to the new organism." p. 26

"During meiosis two phenomena occur which effectively guarantee that the new individual will be genetically unique. One of the phenomena, crossing-over, occurs when the chromosomes pair up. The other, segregation, occurs when the chromosomes begin to separate." p. 26

21. Sussman, L.N. *Paternity Testing By Blood Grouping.* Springfield, IL: Charles C. Thomas Publisher, 1976.

"A complete cell called a zygote with its normal complement of twenty-three pairs of chromosomes is formed and a new somatic cell series - thus a new individual - begins."

22. Bryant, N.J. *Disputed Paternity.* New York: Brian C. Decker, a Division of Thieme-Stratton, Inc., 1980.

"The newly formed cell (which is known as a zygote) represents the beginning of life."

23. Parker, S. *Life Before Birth: The Story of the First Nine Months*. Cambridge: Cambridge University press, 1979.

"The fertilized egg is smaller than a pinhead, but inside it, in the chromosomes, are all the instructions and information needed for a new human being to develop." p. 8

"The egg cell nucleus also releases its chromosomes, and both sets line up in the middle of the cell. This is the moment of fertilization, when a new life comes into being." p. 12 (emphasis added)

24. Audesirk, G.; and Audesink, T. *Biology: Life on Earth*. 2nd ed. New York: Macmillian Publishing Company, 1989.

"A single lucky sperm may succeed in fertilizing it, starting the development of a new human being." p. 587

"Fertilization occurs as the haploid nuclei of sperm and egg fuse, forming a diploid nucleus that contains all the genes of a new human being." p. 588

25. Flanagan, G.L. *The First Nine Months of Life* 2nd ed. New York: Simon and Schuter, 1962.

"A baby begins life as a single cell, smaller than the period at the end of this sentence ..." p. 19

"The ensuing fusion of the two is called fertilization, and it is the vital event which initiates the development of a baby." p. 22

"The genetic make-up of these two new nuclei differs from that of either parent: it is a blend of both. That moment, when the two new nuclei form and the now fertilized egg divides in two, is the beginning of the life of a new individual. This is zero hour of day one." p. 26

26. Nelson, G.E. *Biological Principles with Human Applications* 3rd ed. New York: John Wiley & Sons, 1989.

"Since the parents differed genetically from each other, the zygote contains the genetic blueprint, so to speak, for a unique individual." p. 247

"Whatever the number of genes, there are obviously enough to direct the formation of the whole human animal from a fertilized egg ... ." p. 288

"An additional source of variation arises when a sperm and an egg unite. This recombination of a genetic materials adds to the pool of variation because no two eggs or sperm cells carry precisely the same genes. Therefore each recombination creates a unique individual." p. 288

27. Goin, C.J.; and Goin, O.B. *Man and the Natural World* 2nd ed. New York: Macmillan Publishing Co., Inc., 1975.

"It is the resultant zygote that, by repeated mitotic cell divisions, will give rise to the adult of the next generation. This one of the most amazing facts of biology - that a single cell, by dividing and dividing and dividing again, can give rise to sometimes billions of cells of many different kinds and yet so precisely arranged that the resultant organism is not only a smoothly functioning individual but an individual of the same kind as the parent." p. 183

28. Gilbert, S.F. *Development Biology*. Sunderland, MA: Sinauer Associates, Inc., 1985.

"Fertilization is the process whereby two sex cells (gametes) fuse together to create a new individual with genetic potentials derived from both parents." p. 32

29. Clark, J. ed. *The Nervous System: Circuits of Communication In The Human Body*. Torstar Books, Inc., 1985.

"Each human begins life as a combination of two cells, a female ovum and a much smaller male sperm. This tiny unit, no bigger than a period on this page, contains all the information needed to enable it to grow into the complex structure of the human body. The mother has only to provide nutrition and protection." p. 99

30. Goldenring, J.M. *Development of the Fetal Brain*. 307 The New England Journal of Medicine 564(1982).

"I suggest that as physicians we should view human existence as a continuum from the first cell division of the fertilized ovum until the death of the last cell in the [human] organism." p. 564

31. Bernstein, R. and Bernstein, S. *Biology: The Study of Life*. New York: Harcourt Brace Jovanovick, Inc., 1982.

"The sets of genes carried by offspring produced by sexual reproduction differ from each other and from the sets carried by either parent." p. 544.

"Within 12 hours after sperm penetration the nuclei of the sperm and the egg fuse together, restoring the appropriate number of chromosomes for body cells. All of the genes that will determine the characteristics of the offspring are now present in a single nucleus, and the sex of the offspring is established." p. 584

32. Volpe, E.P. *Biology and Human Concerns* 3rd ed. Dobuque, Iowa: Wm. C. Brown Company Publishers, 1983.

"Although the egg is many times greater in volume than the sperm, the two have equal potentialities as far as inheritance is concerned. The blueprints for traits are carried in the nucleus of each gamete (the mature sex cell - egg or sperm). The genetic characteristics of the future child are established at the time the sperm nucleus unites with the egg nucleus." p. 18

"The fertilized egg is genetically different from both parents, and one could contend that biological life commences at the moment of conception." p. 19

"The traits of an individual are largely determined by the genetic composition of the individual. A specific genetic code is locked into each cell of an individual of the very moment of the union of the sperm and egg nuclei." p. 20

33. Clark, J.; ed. *Growth and Development: The Span of Life In The Human Body*. Torstar Books, Inc., 1985.

"... [T]here is absolutely no doubt at all that the story of the growth and development of a single being has its beginning at conception. This is the instant when a sperm from a human male enters and unites with an egg from a human female. The conceptual 'act of union' sets in motion a train of events of growth and development that only ends - perhaps more than a century later - when life itself ends." p. 9

"Fertilization brings together two sets of chromosomal material, one half the genetic blue print from the father, one half the genetic blueprint from the mother. Sperm and egg composition is so programmed that each sperm contains half the total gene complement of the father, each egg half that of the mother. This ensures that when egg and sperm fuse, a full complement of chromosomes exist in the newly fertilized egg. From this a new individual grows, ..." pp. 9-10

34. Clark, J.; ed. *Genetics and Heredity: The Blueprints of Life*, In *The Human Body*. Torstar Books, Inc., 1985.

"You are unique because the combination of your genes is unique, and nobody has exactly the same combination (even if you are an identical twin - although between such twins there are only subtle differences). Genes provide the fundamental information that determines how a person develops, although environmental acts to shape the final product form the moment of conception onward."

35. Thibodeau, G.A.; and Anthony, C.P. *Structure and Function of the Body* 8th ed. St. Louis: Times Mirror/Mosby College Publishers, 1988.

"The science of the development of the individual before birth is called embryology. It is a story of miracles, describing the means by which a new human life is started and the steps by which a single microscopic cell is transformed into a complex human being." pp. 409-410

"Genetically the zygote is complete. It represents a new single celled individual."